

## Durham Research Online

---

### Deposited in DRO:

15 July 2020

### Version of attached file:

Published Version

### Peer-review status of attached file:

Peer-reviewed

### Citation for published item:

Hind, Karen and Konerth, Natalie and Entwistle, Ian and Lewis, Gwyn and Theadam, Alice and Chazot, Paul (2020) 'Cumulative sportrelated injuries and longer term impact in retired male elite and amateurlevel rugby code athletes and noncontact athletes : a retrospective study.', *Sports medicine.*, 50 (11). pp. 2051-2061.

### Further information on publisher's website:

<https://doi.org/10.1007/s40279-020-01310-y>

### Publisher's copyright statement:

This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

### Additional information:

Special Issue: Rugby health.

### Use policy

---

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in DRO
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full DRO policy](#) for further details.



**Durham**  
University

Department of Sport  
and Exercise Sciences

Inspiring the extraordinary



Facts and Figures:  
**Cumulative  
Injuries and longer  
lasting impacts**

**Thank you very much for taking part in the UK Rugby Health Project and for your continued support.**

The results from the first study are published in the journal, Sports Medicine <http://dro.dur.ac.uk/31049/>. Our research engaged with 189 UK-based rugby players (83 elite and 106 amateur, RU and RL) and 65 UK-based non-contact athletes from sports such as cricket.



## The key findings were:

1. The average age of retirement was 33 in elite rugby players, 36 in amateur rugby players and 42 in non-contact athletes.
2. Concussion was the most frequently reported injury and had the highest recurrence. 81% of elite rugby players and 76% of amateur rugby players reported experiencing at least one concussion during their careers.
3. In rugby players, the injuries most likely to lead to retirement were concussion, upper limb fracture, disc rupture, ACL tear, meniscus tear or back injury. In non-contact athletes, back injury was most likely to lead to retirement.
4. Retired rugby players were 1.7 - 7.3 times more likely to report a given injury and 2.4 - 9.7 times more likely to report continued impact from a given injury, compared to non-contact athletes.
5. Retired elite rugby players reported a median of 39 injuries per player and retired amateur players reported 23 injuries per player. These rates were significantly greater than those for non-contact athletes who reported 7.3 injuries per athlete.
6. Knee ligament injuries and back injuries were also reported to occur at a high rate in retired rugby players, and were associated with longer lasting impacts.
7. In retired elite rugby players, the prevalence of osteoarthritis was more than double that of retired non-contact athletes (51% v 22%), and was linked to previous joint injuries and surgery.
8. Current back pain and severe and regular joint pain were high in all former athletes (64%), particularly former elite rugby players (80%).
9. Injuries occurred more frequently in elite rugby players compared with amateur players suggesting there is no injury type for which there is a protective effect as skill level increases. Instead, a greater intensity of play, greater exposure to risk, and the financial need or desire to return to play, are likely to be more plausible explanations.

For the full research paper please visit: <http://dro.dur.ac.uk/31049/> or if you would like more information email: [karen.hind@durham.ac.uk](mailto:karen.hind@durham.ac.uk)